

**REMARKS**

Claims 1-30 remain pending in the application. Claims 1 and 16 have been amended.

**Claims 1-13, 15-28 and 30 over Haartsen in view of Chan**

In the Office Action, claims 1-13, 15-28 and 30 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent Application Publication No. 2002/0131486 to Haartsen ("Haartsen") in view of U.S. Patent No. 7,200,103 to Chan et al. ("Chan"). The Applicants respectfully traverse the rejection.

Claims 1-13, 15-28 and 30 recite, *inter alia*, a system and method of providing auxiliary coding comprising a station ID parameter of a transmitting device in a home network to a receiver in a home network, using the station ID parameter to perform a table look-up in a station pre-training table stored in the receiver to determine one or more training values associated with data packets on a packet-by-packet basis, wherein the training values are based on the moving average of past frames from that transmitting device and use of the station ID parameter allows the receiver to communicate with a plurality of stations having different transmission characteristics on a packet-by-packet basis.

Haartsen discloses a system and method for training a radio receiver to mitigate the effects of inter symbol interference (ISI) caused by multi-path. The Examiner alleged that the network in Haartsen correlates to any type of network, including a home network. Advisory Action, p. 2. ISI caused by multi-path, however, is a particular problem associated with long range communications between a transmitter and a receiver, such as an automobile (see Figure 1). The problems corrected by the present invention are not the same as multi-path ISI. Haartsen therefore does not disclose or suggest training of a receiver in a home network, as recited in claims 1-13, 15-28 and 30.

Moreover, Haartsen discloses adjusting equalization parameters based on the difference between received training values and referenced training values. See Figure 8. Haartsen fails to disclose or suggest basing the values in a station pre-training table on the moving average of frames previously received from a particular transmitter, as recited in claims 1-13, 15-28 and 30.

The Examiner acknowledges that Haartsen fails to disclose use of a station ID parameter (Office Action, page 4). The Examiner contends, however, that Haartsen's disclosure of a single transmitter and single receiver is merely illustrative and that Haartsen may properly be combined with Chan, which discloses use of station ID parameter and which involve multiple transmitters and receivers. Advisory Action, p. 2. The Applicants respectfully disagree.

The reason Haartsen fails to disclose use of a station ID parameter in a multi-station system is that Haartsen is directed toward a system and method of training a receiver to mitigate for the effects of multi-path ISI, which occurs between a single transmitter and receiver (see Abstract; Fig. 1). As the Examiner points out, the Applicants acknowledge that Haartsen's invention could be used in a multi-station system. The invention, however, would not be used to correct problems associated with multiple transmitters in that system. Rather, it would be used to alleviate ISI from a single transmitter to a receiver. Therefore, it is improper to modify Haartsen by adding a station ID parameter.

The Examiner contends that Haartsen discloses or suggests determining one or more training values associated with data packets on a packet-by-packet basis because a flag in a data packet is used to determine the training sequence that has the same modulation scheme as the data packet. Advisory Action, p. 2. The Applicants respectfully disagree. Since Haartsen is directed to the ISI problem associated with a single transmitter, the modulation scheme will be the same for the remainder of the data packets in a transmission from that transmitter. Therefore, Haartsen does not disclose one or more training values associated with data packets on a packet-by-packet basis, as recited by claims 1-13, 15-28 and 30.

The Examiner acknowledges that Chan is relied on to disclose the concept of a station ID parameter with a plurality of transmitters and receivers. Advisory Action, p. 2. The Applicants therefore understand that the Examiner is not relying on Chan to remedy the other deficiencies in Haartsen discussed above. As noted, it is improper to combine Haartsen with Chan because Haartsen is directed to the ISI problem associated with a single transmitter and receiver.

Thus, even if it were obvious to modify Haartsen with the disclosure of Chan, which it is not as discussed above, the theoretically modified Haartsen would still fail to disclose, teach or suggest use of auxiliary coding comprising a station ID parameter of a transmitting home network device to a receiver, using the station ID parameter to perform a table look-up in a station pre-training table to determine one or more training values associated with data packets on a packet-by-packet basis, where the training values are based on the moving average of past data frames from the transmitter and where the use of a station ID parameter allows the receiver to communicate with a plurality of stations having different transmission characteristics on a packet-by-packet basis, as recited by claims 1-13, 15-28 and 30.

Accordingly, for at least all the above reasons, claims 1-13, 15-28 and 30 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

**Claims 14 and 29 over Haartsen in view of Chan and Chung**

In the Office Action, claims 14 and 29 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Haartsen in view of Chan, and further in view of U.S. Patent No. 6,731,618 to Chung *et al.* ("Chung"). The Applicants respectfully traverse the rejection.

Claims 14 and 29 are dependent on claims 1 and 16 and are patentable over the prior art for the same reasons as claims 1 and 16.

Claims 14 and 29 contain the additional limitation of having the auxiliary coding be provided in a signal independent from a signal including the

data packet. The Office Action relies on Chung to disclose this additional limitation. Office Action, p. 7). As discussed above, however, the assumed combination of Haartsen and Chan fails to disclose or suggest a system and method of providing auxiliary coding comprising a station ID parameter of a transmitting home network device to a receiver, using the station ID parameter to perform a table look-up in a station pre-training table stored in the receiver to determine one or more training values associated with data packets on a packet-by-packet basis, where the training values are based on the moving average of past frames received from a particular transmitter and where use of the station ID parameter allows the receiver to communicate with a plurality of stations having different transmission characteristics on a packet-by-packet basis, as recited by claims 14 and 29. Even if Haartsen and Chan are further modified by Chung, this assumed combination would still not disclose or suggest the foregoing limitations, as recited by claims 14 and 29.

Accordingly, for at least all the above reasons, claims 14 and 29 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

**Conclusion**

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,



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